



State of Utah

GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF WATER QUALITY  
Walter L. Baker, P.E.  
Director

**Water Quality Board**  
Paula Doughty, *Chair*  
Steven P. Simpson, *Vice Chair*  
Myron E. Bateman  
Clyde L. Bunker  
Merritt K. Frey  
Darrell H. Mensel  
Leland J. Myers  
Neal L. Peacock  
Gregory L. Rowley  
Amanda Smith  
Daniel C. Snarr  
Jeffery L. Tucker  
Walter L. Baker  
*Executive Secretary*

***Utah Water Quality Board Meeting***  
**Bear River Migratory Bird Refuge**  
**2155 West Forest Street**  
**Brigham City, Utah**  
Wednesday, May 23, 2012

**Board Meeting begins @ 9:00 AM**  
**Agenda**

- A. **Water Quality Board Meeting – Roll Call**
- B. (Tab 1) **Approval of Minutes for April 18, 2012**
- C. **Executive Secretary's Report** ..... Walt Baker
- D. (Tab 2) **Presentations:**
  - 1. Annual Report of the Nonpoint Source Program ..... Jim Bowcutt
  - 2. Echo Reservoir/Rockport Reservoir TMDL study ..... Kari Lundeen
- E. (Tab 3) **Funding Requests:**
  - 1. Financial Status Report ..... Emily Canton
  - 2. Echo Sewer SSD Introduction ..... Dave Snyder
- F. (Tab 4) **Rulemaking:**
  - 1. Request for adoption of R317-801 *Utah Sewer Management Program* ..... John Kennington
- G. (Tab 5) **Other Business:**
  - 1. Update on PR Springs Appeal ..... Walt Baker
  - 2. Elections for Water Quality Board Chair and Vice Chair ..... Paula Doughty

**Next Meeting – June 27, 2012**  
**DEQ Building Board Room #1015**  
**195 North 1950 West**  
**Salt Lake City, Utah 84116**

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*Executive Secretary*

### MINUTES

#### UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

#### UTAH WATER QUALITY BOARD

#### Dixie Convention Center

#### Entrada B & C

#### St. George, Utah 84770

Wednesday, April 18, 2012

#### UTAH WATER QUALITY BOARD MEMBERS PRESENT

Clyde Bunker	Paula Doughty	Merritt Frey
Leland Myers	Jeffery Tucker	Darrell Mensel
Neal Peacock	Greg Rowley	Steven Simpson
Dan Snarr		

Absent: Myron Bateman and Amanda Smith

#### DIVISION OF WATER QUALITY STAFF MEMBERS PRESENT

Walt Baker, Faye Bell, John Whitehead, Ed Macauley, Leah Ann Lamb, Jeff Ostermiller, Jodi Gardberg, Chris Bittner, John Cook, Judy Etherington, Nick von Stackelberg,

#### OTHERS PRESENT

<u>Name</u>	<u>Organization Representing</u>
Conae Black	City of Green River
Bob Bennett	US FWS
Dal Wayment	So. Davis Sewer District
Paul Wright	DEQ District Engineer
Tania Datta	CH2MHILL
Dan Olson	WEAU
Trevor Lindley	JUB Engineers
John Newman	SVWRF
Regan Bolli	Ephraim City
Bryan Kimball	Ephraim City
Rob Dubuc	FOGSL
Dan James	CVWRF
Jonathan Johansen	Green River City
Doug Nielsen	Green River City
Jim Olson	HDR Engineering
Tom Ward	Salt Lake City
David Keil	HDR
Phil Englemen	Green River City
Jim Schwing	CH2M Hill

Chair Doughty called the Board meeting to order at 8:55 a.m. and invited the members of the audience to introduce themselves.

**APPROVAL OF MINUTES OF THE FEBRUARY 22, 2012 MEETING**

Mr. Meyers noted on page 2 under Presentations, 6<sup>th</sup> line down it should read "Impounded wetland complex" instead of "Impounded wetland complies".

**Motion:**           **It was moved by Mr. Myers and seconded by Mr. Simpson to approve the minutes of the February 22, 2012 with the noted correction. The motion was unanimously approved.**

**Recognition of Service:** Ms. Doughty presented an award to Paul Fulgham in recognition of his service on the Wastewater Operator Certification Council.

**Executive Secretary's Report:** Mr. Baker told the Board that work continues on Utah's approach to address nutrient pollution. Two members of the Board, Leland Myers and Merritt Frey, are participants on the Nutrient Core Team Work Group. As a result from the 2010 census, an increased number of Utah communities required to participate in the MS4 program.

Either in May or June we will be holding Water Quality Board elections to.

**PRESENTATIONS:**

**Certification Council 2011 Annual Report:** Ms. Etherington and Dan James from the Certification Council presented the annual 2011 Certification Council Annual Report.

**Presentation on the Great Salt Lake Water Quality Strategy:** Ms. Gardberg and Mr. Ostermiller presented the draft Water Quality Strategy for the Great Salt Lake. The strategy encompasses several key components including a proposed process for developing numeric criteria for toxic substances, a short- and long-term monitoring strategy, and a prioritization of research needs. Following the Board meeting staff will solicit input on the GSL WQ strategy from government stakeholders and the general public through a series of meetings, an open house, and a 45-day public comment period that is scheduled to begin June 19th.

**FUNDING REQUEST**

**Financial Assistance Status Report** – Ms. Cantón updated the Board on the "Summary of Assistance Program Funds," as outlined on page 3.1.

**Willard Spur Study Update & Request for Release of Funds** – Mr. Ostermiller presented an update on the status of the Willard Spur Study. Mr. Jeff DenBleyker called in to participate in the discussion. The objective for work in 2011 was to establish a baseline condition of Willard Spur that would inform the development of a research program to address stated program objectives. After a review of the proposed work for 2012 and discussion over how they address the program objectives, there was unanimous support to continue the research program as proposed for 2012. Listed on page 5 of the handout is the overall budget for the Willard Spur Study. DWQ recommended that the Water Quality Board release \$820,000 of the \$1,405,000 that the Board previously authorized for conducting the investigations. With this action \$261,000 would remain available for commitment.

**Motion:** It was moved by Mr. Myers and seconded by Ms. Frey to approve to release \$820,000 of funds being held in reserve by the WQ Board for the Willard Spur investigation. The motion was unanimously approved.

**Green River City Request for Funding Authorization** – Mr. Cook introduced Conae Black, Doug Nielsen, and Phil Englemen with Green River City, and Craig Johansen with Johansen & Tuttle Engineering, Green River City's Engineer. The City of Green River is requesting financial assistance in the amount of a \$680,000 Hardship Grant for the construction of its 2010 Wastewater Treatment Plant Improvements Project.

The City's total containment lagoon is currently at capacity for hydraulic and salinity loading. In 2009, Green River applied for ARRA (stimulus) funds to expand the City's total containment lagoon. Because of the cost of the expansion, staff directed the City to work on getting its discharge permit modified so that the project could be scaled back to a disinfection system. The permit was modified in 2009. Since then, staff has worked with the City on various funding and study options for upgrading the system.

The results of this study have shown that it is not enough to simply provide a means for the City to discharge into the Green River. Because of the increase of salinity across the lagoon system, the City can only discharge approximately 50% of its total required discharge and still remain within the Colorado River Salinity Standard of 366 tons of TDS per year. The other 50% of the total required discharge must be disposed of by other means. This required change in disposal has increased the original construction cost estimate.

At the February 22<sup>nd</sup> Board meeting, the Board asked staff to further analyze the City's sewer rate structure to determine if residential connections are subsidizing commercial connections or vice versa, and report back. Staff determined that the residential services are not subsidizing commercial services.

**Motion:** It was moved by Mr. Simpson and seconded by Mr. Rowley to postpone making a motion on Green River City's request until after Green River City has met with the CIB and determined its willingness to provide funding for this project. The motion was unanimously approved.

**Ephraim City Request for Planning Advance:** Mr. Cook introduced Regan Bolli and Bryan Kimball from Ephraim City, and Darin Robinson from Jones and DeMille Engineering. Ephraim City requested a Hardship Planning Advance in the amount of \$30,000 to conduct further alternatives analysis now that a discharge appears feasible. Staff recommended that the Water Quality Board authorize a hardship planning advance in the amount of \$30,000 to Ephraim City for the re-evaluation of the discharging alternatives.

**Motion:** It was moved by Mr. Myers and seconded by Ms. Frey to approve the Hardship Planning Advance of \$30,000 to Ephraim City. The motion was unanimously approved.

#### **RULEMAKING:**

**Request to proceed to Rulemaking for Rule R317-11. *Certification Required to Design, Inspect and Maintain Underground Wastewater Disposal Systems or Conduct Percolation and Soil Tests for Underground Wastewater Disposal Systems:*** Ms. Etherington explained the CLEHA Onsite Wastewater Partnership (COWP) has met during the past year and considered



modifications to the current *Utah Administrative Code, R317-11*. The current rules have helped to create a qualified workforce of individuals certified as onsite professionals. It was recommended the Board approve the proposed changes listed on pages. 4.1 and 4.2.

**Motion:**        **It was moved by Mr. Peacock to approve the proposed changes. The motion was seconded by Mr. Bunker and was unanimously approved.**

**OTHER BUSINESS:**

**Legislative Update:** Mr. Baker gave the Board an Update on the recent legislative session. During the recent legislative session **S.B. 21: Department of Environmental Quality Boards** was passed and will go into effect on May 7, 2012. The legislation reduces the number of members on the board from twelve to nine. All DEQ board will be reconstituted as the terms of all present members of the boards will expire as a result of the legislation and reappointments by the Governor will need to be. Listed on pages 5.1 through 5.3 explain the changes to the disciplines which will be represented on the Water Quality Board after March 1, 2013.

**S.B. 11 – DEQ Boards Adjudicative Proceedings** was passed which will change the adjudicatory process for the DEQ boards and will require the department to adopt rules that bring existing rules into harmony with this legislation.

**H.B. 458 – Wastewater System Amendments** was passed in the House and forwarded to the Senate but the session ended before the bill could be voted on by the Senate.

**-Next Meeting –  
June 27, 2012**

DEQ Building Board Room #1015  
195 North 1950 West  
Salt Lake City, Utah 84116

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Paula Doughty, Chairperson  
Utah Water Quality Board





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### MEMORANDUM

**TO:** Water Quality Board Members

**THROUGH:** Walter L. Baker, Director 

**FROM:** Jim Bowcutt, Nonpoint Source Program Coordinator

**DATE:** May 3, 2012

**SUBJECT:** State Nonpoint Source Program Annual Report for Fiscal Year 2011

The Division of Water Quality receives grant funds to help implement nonpoint source pollution control projects throughout the state. These grants include Section 319(h) funds from the Environmental Protection Agency and State Nonpoint Source funds authorized by the Water Quality Board. Every year an annual report is submitted to EPA on the accomplishments of the State's Nonpoint Source Program. Staff will present a summary of this report to the Water Quality Board during the meeting scheduled for May 23<sup>rd</sup>, 2012.

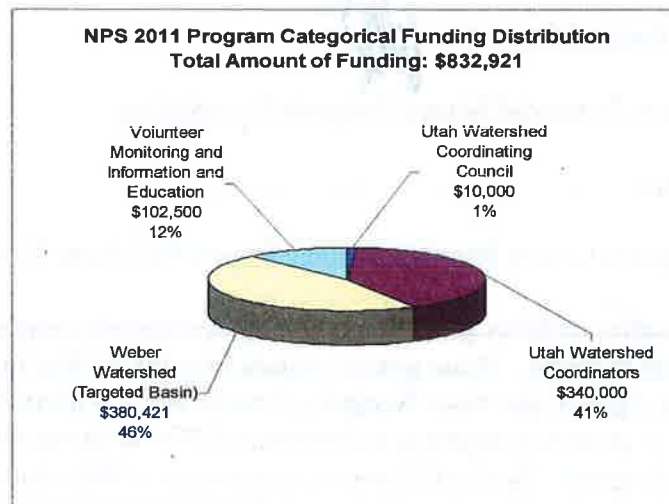
Attached is an executive summary of the Annual Nonpoint Source Program Report and funding tables for the 2011 fiscal year.

2.1

## State of Utah Nonpoint Source (NPS) Annual Report May 2012 Water Quality Board Meeting

### Section 319 Nonpoint source funds

- In FY-11 the State of Utah received \$1,541,000 in Federal Section 319(h) funds. Of these funds, \$708,079 was used for staffing and support, while the remaining \$832,921 was dedicated to 4 nonpoint source projects with the majority of the funding going to the Weber River Watershed, the targeted basin in 2012() and support for Local Watershed Coordinator positions.



- In addition to the FY-11 funds, DWQ continues to manage five other federal grant awards. The table below summarizes grant awards by year and the approximate percentage that has already been expended in each grant.

Current Section 319(h) Nonpoint Source Funding Project Allocations				
Federal Fiscal Year	Grant Award	Expenditures in FY-11	Total Expenditures	Percent Expended
FY-06	\$1,219,600	\$148,350	\$1,055,795	87%
FY-07	\$1,126,500	\$95,624	\$764,033	68%
FY-08	\$1,161,585	\$165,861	\$848,444	73%
FY-09	\$1,119,400	\$402,186	\$700,094	63%
FY-10	\$1,065,000	\$413,578	\$416,101	39%
FY-11	\$832,921	\$0	\$0	0%
<b>Total</b>	<b>\$6,525,006</b>	<b>\$1,225,554</b>	<b>\$3,784,467</b>	<b>58%</b>

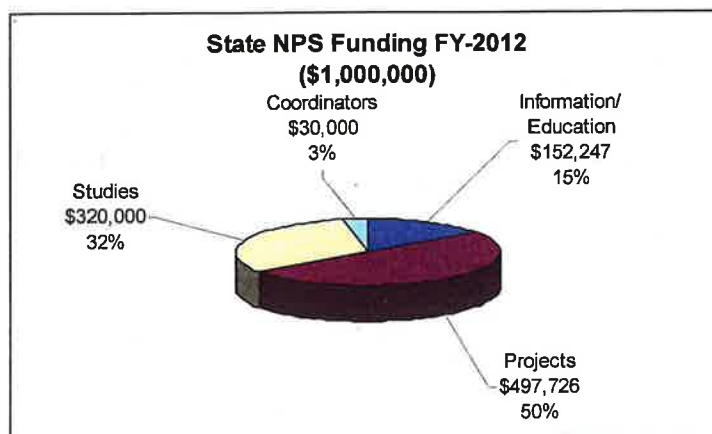
- In FY-2011 the targeted basin was the Weber Watershed. The main area of focus has been East Canyon Creek where several miles of river restoration has already occurred. The Weber Basin will be the targeted basin in 2012 as well to synchronize the intensive monitoring cycle with the targeted basin funding schedule.

Basin Priority Funding Schedule											
Watershed	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
(1) Jordan/ Utah lake											
(2) Colorado River											
(3) Sevier, Cedar-Beaver											
(4) Bear River											
(5) Weber River											
(6) Uinta Basin											

Project Sponsor	Project Description	Funding Requests	Match Required	Total
DWQ	Local Watershed Coordinators	\$340,000	\$226,667	\$566,667
USU Extension	Volunteer Monitoring and I&E	\$102,500	\$68,333	\$170,833
DWQ	Utah Watershed Coord. Council	\$10,000	\$6,667	\$16,667
Kamas Valley CD	Upper Weber TMDL Implementation	\$95,230	\$63,487	\$158,717
Snyderville Basin WRF	East Canyon Restoration	\$283,070	\$188,713	\$471,783
<b>Total</b>		<b>\$830,800</b>	<b>\$553,867</b>	<b>\$1,384,667</b>

### State Nonpoint Source Funds

- In 2011, \$1,000,000 in State NPS Funds was allocated to 23 different projects across the state. Of this funding, the majority of it was spent on project implementation (50%). Various studies which focus on pollutant source identification and TMDL development were also funded. Due to budget cuts in the Section 319 funding the watershed coordinator budget also needed to be supplemented with State NPS funding. Information and Education projects were also funded to help increase public awareness of NPS issues that exist throughout the state.





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### MEMORANDUM

**TO:** Water Quality Board Members

**THROUGH:** Walter L. Baker, Director 

**FROM:** Kari Lundeen, Weber River TMDL Coordinator

**DATE:** May 9, 2012

**SUBJECT:** Total Maximum Daily Load Study for Echo and Rockport Reservoirs,  
Weber River Basin

The Division of Water Quality has begun a Total Maximum Daily Load (TMDL) Study to address impairments of Echo and Rockport Reservoirs in the Upper Weber River Watershed. This study is being conducted with the financial support of Snyderville Basin Water Reclamation District and is being contracted through SWCA Environmental Consultants.

Staff will present an overview of the TMDL development strategy and timeline to the Water Quality Board during the meeting scheduled for May 23<sup>rd</sup>, 2012. An executive summary is attached.

Rockport and Echo Reservoirs are listed as impaired on Utah's 303(d) list due to exceedances of the dissolved oxygen (DO) criteria for a cold-water fishery (Class 3A). The 303(d) listings were validated using Utah's *Water Quality Assessment Guidance*, which provides for evaluation of the combined water column temperature and DO. In Echo and Rockport Reservoirs, from July through September, there is often no layer of suitable fish habitat where the water temperature is below the cold water fishery standard of 20 degrees Celsius (°C) and DO is greater than 6.5 mg/l (the 30-day DO standard). The worst impairments occurred in both reservoirs in 2007 and 2008, when there was no habitat meeting the minimum temperature and DO criteria from June through September in Echo Reservoir and July through September in Rockport Reservoir.

The current TMDL water quality study began in mid-March with a stakeholder meeting followed by two watershed tours. Local stakeholders actively participating in the study include local ranchers, Natural Resources Conservation Service, the Kamas Valley Conservation District, Summit Conservation District, Summit County Health Department, and Coalville City.

2.4



## Rockport Reservoir and Echo Reservoir TMDLs

### Watershed Location

Echo and Rockport Reservoirs are located in the Upper Weber watershed, northeast of Park City, Utah. The Upper Weber watershed is 725 square miles and includes the towns of Coalville, Oakley, Kamas, and a portion of Park City. The Weber River originates in the Upper Weber watershed and is fed by several large tributaries, including Chalk Creek, Silver Creek, and Beaver Creek. The lands in the watershed are almost entirely privately owned.

### Impairment

Rockport and Echo Reservoirs are listed as impaired on Utah's 303(d) list due to exceedances of the dissolved oxygen (DO) criteria for a cold-water fishery (Class 3A). Echo Reservoir was first listed in 1996 and Rockport Reservoir was first listed in 2008.

The 303(d) listings were validated using Utah's *Water Quality Assessment Guidance*, and water column DO data collected at the dam sites of both reservoirs between 2002 and 2011. Utah has multiple criteria for DO in reservoirs. When all life stages of cold-water fish are present the following dissolved oxygen criteria apply: minimum of 4.0 mg/l, 7-day average no less than 5.0 mg/l, and 30-day average of no less than 6.5 mg/l. Utah's *Water Quality Assessment Guidance* provides the framework for assessing these criteria in stratified lakes, including deep impoundments such as Rockport and Echo Reservoirs. Specifically, the cold-water beneficial use is supported if more than 50% of the water column attains the standard.

Between 2002 and 2011, 48 DO profiles were collected near Echo Dam and 32 DO profiles were collected near Rockport Dam. These profiles were collected during the typical stratification season (May – October). On average, 55% of the water column in Echo Reservoir and 42% of the water column in Rockport Reservoir is below the minimum DO criterion (4.0 mg/l) when all life stages of cold-water fish species are present. These exceedances typically occurred in August. Consideration of the 30-day DO criterion is also appropriate because the stratification period extends for at least 90 days each summer season during which time oxygen concentrations progressively decline. Typically, more than 50% of the water column exceeds the 30-day DO criterion (6.5 mg/L) by June or July in both reservoirs.

Utah's *Water Quality Assessment Guidance* also provides for evaluation of the combined water column temperature and DO. In Echo and Rockport Reservoirs, from July through September, there is often no layer of suitable fish habitat where the water temperature is below the cold water fishery standard of 20 degrees Celsius (°C) and DO is greater than 6.5 mg/l (the 30-day DO standard). Further, over 80% of the temperature/DO profiles from 2002 through 2011 show that there is less than 2 meters of habitat that meet both the temperature and the 30-day DO criterion. The worst impairments occurred in both reservoirs in 2007 and 2008 when there was no habitat meeting the minimum temperature and DO criteria from June through September in Echo Reservoir and July through September in Rockport Reservoir. Furthermore, typically by August, there is no habitat present in either reservoir with temperatures below 20°C and DO greater than 4.0 mg/L (the minimum water quality criterion).

## Approach

The TMDL analysis will include water quality data analyses, spatial analyses, stakeholder interviews, watershed modeling using the *Soil and Water Assessment Tool (SWAT)*, and reservoir modeling using the *BATHTUB* reservoir model.

Initial watershed characterization and nutrient (nitrogen and phosphorus) source identification will be based on: 1) evaluation of sources identified in the draft 2006 Echo Reservoir TMDL, 2) Utah Pollutant Discharge Elimination System permits in the watershed, 3) tributary TMDLs, 4) stormwater data, 5) the *Utah Animal Feedlot Runoff Risk Index* model, 6) maps of septic systems and estimated failure rates, and 7) discussions with local watershed stakeholders about typical agricultural practices. All known nutrient sources will be cataloged by location to the subwatershed scale, type, ownership, and pollutant load at the source. Supplemental data will be collected to characterize the erosion nutrient load from tributaries to Chalk Creek. Probable future sources of nutrient pollution based on changes in population, land use, and development in the watershed that may result in changes to nutrient loading will be incorporated into the TMDL analysis.

The SWAT model will be used to calculate nutrient loads to Echo and Rockport Reservoirs and to apportion the current load to specific sources. Model inputs include water diversions, irrigation application, spatial data (e.g., slope, soils, and land use), and daily climate data. In addition, natural background sources will be estimated using the standard SWAT algorithms for overland flow and runoff. Once calibrated, the SWAT watershed model will be used to estimate a watershed-wide water budget and calculate the total load of both nitrogen and phosphorus to Echo and Rockport Reservoirs by season. Seasons will be defined by the period of summer stratification when the reservoirs are impaired.

The reservoir TMDL analyses will be completed using the BATHTUB model to identify nutrient loading that will attain DO water quality standards under normal, wet, dry, and future climatic conditions. The nutrient load to the reservoirs will be an output of the SWAT models. TMDLs will be developed separately for Echo and Rockport Reservoirs, with the nutrient load discharged from Rockport Reservoir as an input load to the Echo Reservoir watershed. TMDL calculations will be completed for several climate- and reservoir-level scenarios to ensure that the TMDL will be protective of critical conditions in the reservoirs. The uncertainty associated with calculation of the nutrient loads will be used to develop a margin of safety for the TMDLs. The BATHTUB and SWAT models will be used to develop a linkage between the identified impairments, the nutrient sources and their respective loads, the proposed load reductions, and the water quality standards.

Following the TMDL analysis, a project implementation plan will be prepared for the Echo and Rockport Reservoir TMDLs. The project implementation plan will outline a strategy to reduce nutrient loading, attain water quality standards, and restore the reservoirs to full support status. It will include an evaluation of the existing BMPs and completed implementation projects in the watershed. The implementation plan, in conjunction with portions of the TMDL, will include the 9 key elements identified by the EPA that are considered critical for achieving improvements in water quality and obtaining 319 funds. These elements will help provide reasonable assurance that the non-point source load allocations identified in the TMDL will be achieved.



### **Schedule**

The current TMDL water quality study began in mid-March with a stakeholder meeting followed by two watershed tours. Modeling began in early May and a draft TMDL report will be ready for agency review in mid-September. Meetings with the water quality board, stakeholders, and public are scheduled throughout the TMDL process. The proposed schedule includes time for review of the TMDL report by the water quality board prior to submittal to EPA.

**Loan Funds  
Financial Projections**

WPS

	4th Qtr FY 2012 Apr - June 2012	1st Qtr FY 2013 July - Sept 2012	2nd Qtr FY 2013 Oct - Dec 2012	3rd Qtr FY 2013 Jan - Mar 2013	4th Qtr FY 2013 Apr - June 2013	1st Qtr FY 2014 July - Sept 2013
<b>STATE REVOLVING LOAN FUND (SRF)</b>						
<b>Funds Available</b>						
SRF - 1st Round (LOC) 2011 Cap Grant	\$ 278,997	\$ -	\$ -	\$ -	\$ -	\$ -
SRF - 1st Round (LOC) 2012 Cap Grant	\$ 7,125,120	\$ -	\$ -	\$ -	\$ -	\$ -
State Match	\$ 1,636,802	\$ -	\$ -	\$ -	\$ -	\$ -
SRF - 2nd Round	\$ 38,748,700	\$ 32,532,385	\$ 34,624,793	\$ 36,141,274	\$ 39,149,598	\$ 42,249,574
Interest Earnings at 0.6%	\$ 59,770	\$ 50,181	\$ 53,409	\$ 55,748	\$ 60,388	\$ 65,170
Loan Repayments	\$ 3,860,397	\$ 2,042,227	\$ 1,463,073	\$ 6,177,576	\$ 3,039,588	\$ 2,065,918
<b>Total Funds Available</b>	<b>\$ 51,709,785</b>	<b>\$ 34,624,793</b>	<b>\$ 36,141,274</b>	<b>\$ 42,374,598</b>	<b>\$ 42,249,574</b>	<b>\$ 44,380,662</b>
<b>Project Obligations</b>						
Elwood Town - Principal Forgiveness	\$ (1,381,400)	\$ -	\$ -	\$ -	\$ -	\$ -
Granger-Hunter Improvement District	\$ (5,452,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Kearns Improvement District 2011	\$ (6,555,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Santaquin City	\$ (5,234,000)	\$ -	\$ -	\$ -	\$ -	\$ -
South Valley WRF - NonPoint Source	\$ (555,000)	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Loan Authorizations</b>						
Coalville	\$ -	\$ -	\$ -	\$ (3,225,000)	\$ -	\$ -
<b>Projects in Planning</b>						
Long Valley Town	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Obligations</b>	<b>\$ (19,177,400)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (3,225,000)</b>	<b>\$ -</b>	<b>\$ -</b>
<b>SRF Unobligated Funds</b>	<b>\$ 32,532,385</b>	<b>\$ 34,624,793</b>	<b>\$ 36,141,274</b>	<b>\$ 39,149,598</b>	<b>\$ 42,249,574</b>	<b>\$ 44,380,662</b>

**UTAH WASTEWATER LOAN FUND (UWLF)**

<b>Funds Available</b>						
UWLF	\$ 7,416,505	\$ 976,754	\$ 1,953,579	\$ 2,783,504	\$ 4,350,509	\$ 5,716,827
Sales Tax Revenue	\$ -	\$ 896,875	\$ 896,875	\$ 896,875	\$ 896,875	\$ 896,875
Loan Repayments	\$ 241,000	\$ 406,900	\$ 260,000	\$ 997,080	\$ 796,393	\$ 412,000
<b>Total Funds Available</b>	<b>\$ 7,657,505</b>	<b>\$ 2,280,529</b>	<b>\$ 3,110,454</b>	<b>\$ 4,677,459</b>	<b>\$ 6,043,777</b>	<b>\$ 7,025,702</b>
<b>General Obligations</b>						
State Match Transfer	\$ (1,636,802)	\$ -	\$ -	\$ -	\$ -	\$ -
DWQ Administrative Expenses (TMDL, etc.)	\$ (326,950)	\$ (326,950)	\$ (326,950)	\$ (326,950)	\$ (326,950)	\$ (326,950)
<b>Project Obligations</b>						
None at this time	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Loan Authorizations</b>						
Ephraim City	\$ (2,091,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Murray City	\$ (2,626,000)	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Projects in Planning</b>						
None at this time	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Obligations</b>	<b>\$ (6,680,752)</b>	<b>\$ (326,950)</b>	<b>\$ (326,950)</b>	<b>\$ (326,950)</b>	<b>\$ (326,950)</b>	<b>\$ (326,950)</b>
<b>UWLF Unobligated Funds</b>	<b>\$ 976,754</b>	<b>\$ 1,953,579</b>	<b>\$ 2,783,504</b>	<b>\$ 4,350,509</b>	<b>\$ 5,716,827</b>	<b>\$ 6,698,752</b>

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WPS

# Hardship Grant Funds Financial Projections

	4th Qtr FY 2012 Apr - June 2012	1st Qtr FY 2013 July - Sept 2012	2nd Qtr FY 2013 Oct - Dec 2012	3rd Qtr FY 2013 Jan - Mar 2013	4th Qtr FY 2013 Apr - June 2013	1st Qtr FY 2014 July - Sept 2013
<b>HARDSHIP GRANT FUNDS (HGF)</b>						
<b>Funds Available</b>						
Beginning Balance	\$ -	\$ 6,147,725	\$ 4,625,045	\$ 4,631,904	\$ 5,128,484	\$ 1,220,610
Federal HGF Beginning Balance	\$ 11,811,751	\$ -	\$ -	\$ -	\$ -	\$ -
State HGF Beginning Balance	\$ 115,872	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings at 0.6%	\$ 18,398	\$ -	\$ -	\$ -	\$ -	\$ -
UWLP Interest Earnings at 0.6%	\$ 11,440	\$ 1,507	\$ 3,013	\$ 4,294	\$ 6,711	\$ 8,818
Hardship Grant Assessments	\$ 980,924	\$ 459,861	\$ -	\$ 326,983	\$ 1,052,481	\$ 435,833
Interest Payments	\$ 166,650	\$ 77,952	\$ 3,845	\$ 165,304	\$ 269,934	\$ 73,315
Hardship Advance Repayments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Funds Available</b>	<b>\$ 13,105,036</b>	<b>\$ 6,687,045</b>	<b>\$ 4,631,904</b>	<b>\$ 5,128,484</b>	<b>\$ 6,457,610</b>	<b>\$ 1,738,576</b>
<b>Project Obligations</b>						
Big Water (cost share CIB) - Construction Grant	\$ (1,166,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Blanding City - Planning Adv.	\$ (39,900)	\$ -	\$ -	\$ -	\$ -	\$ -
Coalville - Planning Adv.	\$ (25,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Coalville - Construction Grant	\$ -	\$ (1,062,000)	\$ -	\$ -	\$ (5,237,000)	\$ -
Duchesne County - Hancock Cove	\$ (22,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Elwood Town - Construction Grant	\$ (750,600)	\$ -	\$ -	\$ -	\$ -	\$ -
Ephraim - Planning Adv.	\$ (30,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Green River - Planning Adv.	\$ (23,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Heber Valley - Planning Adv.	\$ (68,000)	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Projects in Planning</b>						
None at this time	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Non-Point Source Obligations</b>						
DEQ - Economic Study of Nutrient Removal	\$ (229,132)	\$ -	\$ -	\$ -	\$ -	\$ -
DEQ - Nutrient Reduction Benefit Study	\$ (75,115)	\$ -	\$ -	\$ -	\$ -	\$ -
DEQ - Willard Spur Study	\$ (1,287,774)	\$ -	\$ -	\$ -	\$ -	\$ -
Division of Wildlife Resources - Strawberry	\$ (19,853)	\$ -	\$ -	\$ -	\$ -	\$ -
Division of Wildlife Resources - Sevier River	\$ (26,349)	\$ -	\$ -	\$ -	\$ -	\$ -
Snyderville Basin	\$ (14,896)	\$ -	\$ -	\$ -	\$ -	\$ -
Twelve Mile Canyon	\$ (507,548)	\$ -	\$ -	\$ -	\$ -	\$ -
UACD	\$ (100,000)	\$ -	\$ -	\$ -	\$ -	\$ -
UDAF	\$ (1,000,000)	\$ -	\$ -	\$ -	\$ -	\$ -
Utah Farm Bureau	\$ (100,000)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2009 - Remaining Payments	\$ (89,068)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2010 - Remaining Payments	\$ (278,808)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2011 - Remaining Payments	\$ (299,108)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2012 - Remaining Payments	\$ (805,158)	\$ -	\$ -	\$ -	\$ -	\$ -
FY 2013 Allocation	\$ -	\$ (1,000,000)	\$ -	\$ -	\$ -	\$ -
FY 2014 Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,000,000)
<b>Non-Point Source Projects in Planning</b>						
None at this time	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Obligations</b>	<b>\$ (6,957,311)</b>	<b>\$ (2,062,000)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (5,237,000)</b>	<b>\$ (1,000,000)</b>
<b>HGF Unobligated Funds</b>	<b>\$ 6,147,725</b>	<b>\$ 4,625,045</b>	<b>\$ 4,631,904</b>	<b>\$ 5,128,484</b>	<b>\$ 1,220,610</b>	<b>\$ 738,576</b>

3.2

\*Projects being presented to the WQB

Date Printed: 5/8/2012

WQB  
5/8/12

Application Number: \_\_\_\_\_  
Date Received: \_\_\_\_\_  
Date to be presented to the WQB: May 23, 2012

STW  
DAD  
ME  
WTS

**WATER QUALITY BOARD  
FEASIBILITY REPORT FOR WASTEWATER TREATMENT PROJECT  
INTRODUCTION**

APPLICANT: Echo Sewer SSD

PRESIDING OFFICIAL: David Ure, Chairperson, Summit County Council

TREASURER/RECORDER: (to be appointed)

CONSULTING ENGINEER: Lane Peirce, P.E.  
Sunrise Engineering  
12227 South Business Park Dr., Ste. 220  
Draper, UT 84020  
Telephone: (801) 523- 0100

BOND COUNSEL: Eric Todd Johnson  
Blaisdell & Church, P.C.  
5995 S. Redwood Rd.  
Taylorsville, Utah 84123  
Telephone: (801) 261-3407 ext. 3

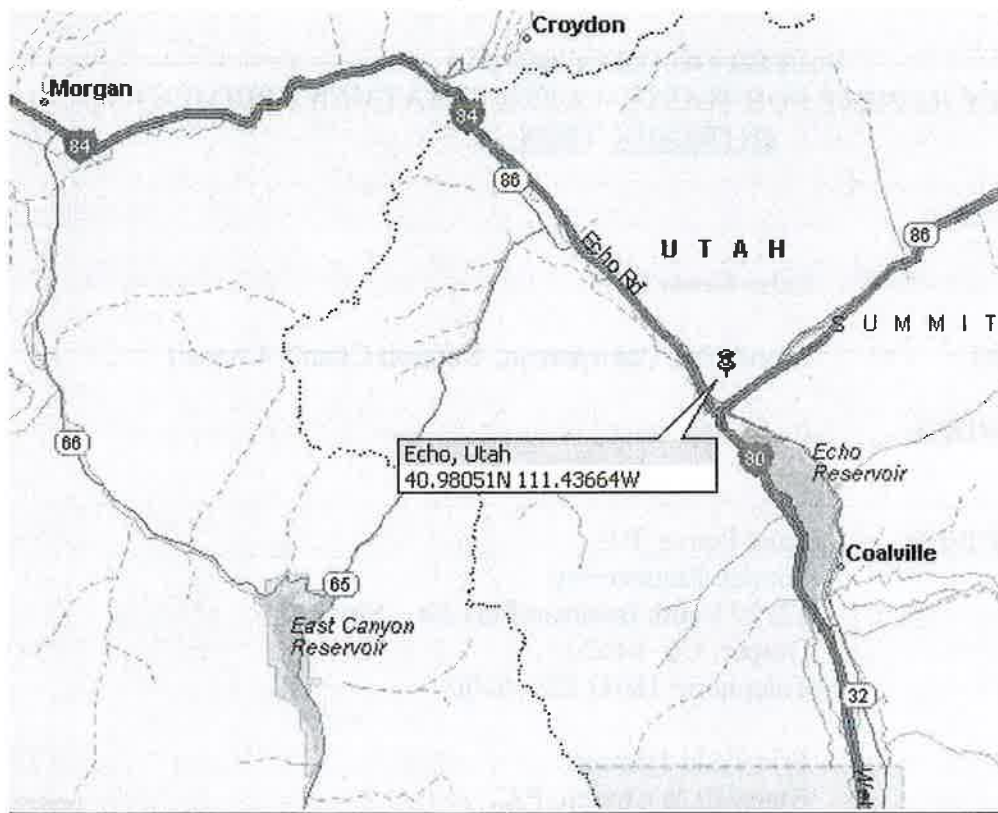
**APPLICANT'S REQUEST:**

Echo Sewer SSD is requesting financial assistance in the form of a \$251,000 Hardship Grant and a \$218,000 loan at zero percent interest over 20 years for the replacement of its Large Underground Wastewater Disposal System (LUWDS). In addition, Echo Sewer SSD is requesting a design advance in the amount of \$128,250 to pay for engineering planning, design, and land purchase costs.

**APPLICANT'S LOCATION:**

The community of Echo is located within Summit County, at the intersection of Interstate 80 and Interstate 84, approximately 20 miles from the Wyoming-Utah border.

### **MAP OF APPLICANT'S LOCATION**



### **BACKGROUND:**

Echo is a small unincorporated community served by an aged sanitary sewer collection system and LUWDS owned and operated by Echo Sewer Company, a private Shareholder Company. The current population of Echo is estimated to be 56 persons in the 2010 census, comprising approximately 17 single family connections and 6 commercial connections. The commercial connections consist of 2 restaurants, a motel with 6 units, a service station (with living unit in the rear), a post office/old school building, and a historic church meeting hall. This is equivalent to 26 ERUs, although the restaurants and the living unit in the service station are not currently occupied. In addition, there are approximately 5 vacant properties. Current land use within Echo is a mix of residential, agricultural, and commercial.

### **PROJECT NEED:**

Following a change in management, Echo Sewer Company contacted the Division of Water Quality (DWQ) to investigate funding to hire an engineer to evaluate system deficiencies. It was determined that the collection system had a crushed pipe under the Union Pacific Railroad tracks (going to the LUWDS) and there appeared to be problems with the LUWDS.



On April 27, 2011 David Snyder of the Division of Water Quality (DWQ) and Bob Swenson, Summit County Health Department inspected the existing LUWDS and performed a dye test. Dye was placed in the septic tank and shortly afterward, observed surfacing from the absorption field, and flowing to a moat-like channel surrounding the leach field, potentially creating a public health condition. A Notice of Violation and Order was issued on May 5, 2011, and Echo Sewer directed Sunrise Engineering to study options for repairing or replacing the system. Sunrise Engineering worked with DWQ in determining that the existing site was damaged beyond repair, and a new site would be needed. Echo Sewer could not afford to construct a new LUWDS, so it hired an attorney and petitioned Summit County to form a Special Service District to enable the sewer system to qualify for affordable financing.

Without affordable financing, the community will not have the means to replace its existing failed LUWDS.

#### **ALTERNATIVES EVALUATED:**

The consulting engineer evaluated the following treatment alternatives for Echo:

1. No action.
2. Rehabilitate the existing LUWDS.
3. Individual onsite wastewater systems.
4. Relocate the LUWDS.

The only feasible alternative is to secure a new site and relocate the LUWDS.

#### **POSITION ON PROJECT PRIORITY LIST:**

This project is ranked 4 of 14 on the Wastewater Treatment Project Priority List.

#### **POPULATION GROWTH:**

Echo is a very small community with a current population of only 56 persons. This is too small to accurately project growth. In addition, Echo has been known to experience periods of declining population. The new LUWDS will be sited on land sufficient to accommodate 50 ERUs, with initial construction sufficient to serve 31 ERUs, based on 26 existing ERUs and 5 vacant lots.

#### **PUBLIC PARTICIPATION AND DEMONSTRATION OF PUBLIC SUPPORT:**

May 9, 2011 - Echo Sewer Company held a public meeting to discuss the crushed sewer pipe, failing LUWDS and DWQ Notice of Violation. A majority of the members voted to hire Sunrise Engineering to evaluate alternatives to correct the deficiencies.

November 7, 2011- Echo Sewer met with Summit County manager, to obtain meeting with Summit County Council. Purpose was outlined by engineer, with DWQ attending.

December 14, 2011- Sunrise Engineering presented to Summit County Council work session: a summary of the situation at Echo, and introduction of request to form a body politic.

January 18, 2012- Summit County Council voted to allow a separate body politic to be formed for the wastewater system serving Echo.

March 21, 2012- Summit County Council was presented and accepted the formal boundary of Echo SSD.

April 18, 2012- Summit County Council adopted the Echo City SSD, and issued public notice.

May 3, 2012- Several more signatures by Summit County program directors are necessary for body politic and boundary map. This request for forming a new body politic will be sent to the Lt. Governor for signature. Upon signature, the body politic is formally created. Summit County Council will name members of new body politic, with chairperson. Echo Sewer Company will need to turn over all assets to newly created body politic.

#### **IMPLEMENTATION SCHEDULE:**

Form body politic	May 2012
Apply to WQB for Funding:	May 2012
WQB Introduction	May 2012
Joint Public Meeting (relinquish assets)	June 2012
WQB Funding Authorization:	June 2012
Final Public Hearing	July 2012
Facility Plan Approval	July 2012
Issue Construction Permit	March 2013
Bid Opening	April 2013
Complete Construction	September 2013

#### **APPLICANT'S CURRENT USER CHARGE:**

The longstanding current user charge rate is \$5 per month per share (similar to ERU).

The 2009 Median Adjusted Gross Income (MAGI) for Echo City is \$38,660 resulting in an affordable sewer bill of \$45.10 per month.



**COST SHARING:**

Summit County has been awarded a \$150,000 CDBG grant for the Echo Sewer project subject to the Water Quality Board providing matching funds.

<u>Funding Source</u>	<u>Cost Sharing</u>	<u>Percent of Project</u>
WQB Hardship Grant	\$ 251,000	41%
WQB loan	\$218,000	35%
CDBG grant	<u>\$150,000</u>	<u>24%</u>
	\$619,000	100%

**COST ESTIMATE:**

Planning Engineering	\$38,500
Environmental	\$10,000
Design/Bid/Survey	\$58,500
Construction	\$389,145
10% Contingency	\$39,425
Construction Management Services	\$40,000
Land Purchase	\$21,250
Attorney Fee	\$20,000
1% Loan Administration Fee	\$2,180
Total Project Cost:	\$619,000

**STAFF RECOMMENDATIONS:**

**Staff will provide recommendations at the Authorization next month.**

File: F:\wp\Echo City Feasibility Report12.doc





# MOUNTAINLAND

ASSOCIATION OF GOVERNMENTS

Serving Summit, Utah and Wasatch Cities & Counties

March 21, 2012

Annette Singleton  
Summit County  
PO Box 128  
Coalville, UT 84017

Dear Annette:

On behalf of Mountainland Association of Governments, it is my pleasure to inform you that Summit County will receive up to \$150,000.00 for the Echo Sewer Project in the 2012 funding cycle. This award is conditional upon the Echo project receiving the matching funding from the Division of Water Quality. Echo has until May 8<sup>th</sup> to secure the funding and alert us.

If awarded, please note that the State CDBG staff found the engineering charges to be excessive and will pay NO more than \$92,000 in engineering costs.

A mandatory Grantee Workshop will be held on Tuesday, May 15, 2012. The CDBG State Office will alert you to the time and location of the meeting. Please plan on sending the project manager for your project. The project manager is the staff person who will be conducting ALL oversight of the CDBG grant including but not limited to reporting, reimbursement draw downs, Davis Bacon, etc.

We are happy to be able to assist your organization in the important work you do in our community. Please don't hesitate to contact us if you have any questions or need assistance.

Sincerely,

*Michelle Caldwell*

Michelle Caldwell  
Community and Economic Development Program Manager





State of Utah

GARY R. HERBERT  
Governor

GREG BELL  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF WATER QUALITY  
Walter L. Baker, P.E.  
Director

**MEMORANDUM**

TO: Utah Water Quality Board

THROUGH: Walter Baker, Executive Secretary  
John Whitehead, Assistant Director *WLB*

FROM: John Kennington *JK*

DATE: May 14, 2012

SUBJECT: Request for rule adoption: Utah Sewer Management Program, Rule R317-801

**Purpose of Action Item**

The purpose of this action item is to request adoption of the attached draft rule R317-801, "Utah Sewer Management Program" that is proposed to regulate all public wastewater collection systems in the State of Utah. The rule language is included in the Board packet.

**Background**

In the last two years the rule was developed in a cooperative effort between the regulated community and the Division. The rule has been subjected to several rounds of review by the regulated community, Division staff and management, and the Utah Attorney General.

It was first introduced to the Board at its June 2010 meeting. Last year it went through one round of rulemaking, which resulted in some constructive comment based on some regulated community concerns. Changes were made to the rule to clarify the limits of liability for permitted systems from problems which may occur outside their jurisdictions, from private laterals and unpermitted private collection systems. A template Sewer Management Plan was also developed to serve as a guide to reduce the burden on those collection entities who may develop their own Sewer Management Plan, as required by the rule.

The rule sets out a sewer collection system management program that contains requirements for the reporting of sanitary sewer overflows, and for essential components of a program to plan, maintain and operate sewer collection systems.

The Division requests Board authorization to adopt R317-801 as rule. The draft was posted for

4.1

public comment between March 15 and April 16, 2012. No comments were received and, thus, no changes were made to the posted draft.

This program will be implemented utilizing existing resources in the UPDES Engineering Section, estimated to initially require 0.5 FTE for the first six months and 0.25 FTE thereafter. The program should be fully implemented by October 1, 2012.

If you have any questions about the rule please contact John Kennington (801-536-4380) at the Division of Water Quality.

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## **R317. Environmental Quality, Water Quality.**

### **R317-801. Utah Sewer Management Program (USMP).**

#### **R317-801-1. Applicability and Definitions.**

1.1 Applicability . Any federal or state agency, municipality, county, district, and other political subdivision of the state that owns or operates a sewer collection system is required to comply with this rule, R317-801.

1.2 Definitions . The following definitions are to be used in conjunction with those in R317-1-1 and R317-8-1. The following terms have the meaning as set forth unless a different meaning clearly appears from the context or unless a different meaning is stated in a definition applicable to only a portion of these rules:

- (1) "BMP" means "best management practice".
- (2) "CCTV" means "closed circuit television.
- (3) "CIP" means a "Capital Improvement Plan".
- (4) "DWQ" means "the Utah Division of Water Quality".
- (5) "FOG" means "fats, oils and grease".
- (6) "I/I" means "infiltration and inflow".

(7) "Permittee" means the federal and state agency, municipality, county, district, and other political subdivision of the state that owns or operates a sewer collection system or who is in direct responsible charge for operation and maintenance of the sewer collection system. When two separate federal and state agency, municipality, county, district, and other political subdivision of the state are interconnected, each shall be considered a separate Permittee.

(8) "SECAP" means "System Evaluation and Capacity Assurance Plan".

(9) "Sewer Collection System" means a system for the collection and conveyance of wastewaters or sewage from domestic, industrial and commercial sources. The Sewer Collection System does not include sewer laterals under the ownership and control of an owner of real property, private sewer systems owned and operated by an owner of real property, and systems that collect and convey stormwater exclusively.

(10) "SORP" means "Sewer Overflow Response Plan"

(11) "SSMP" means "Sewer System Management Plan".

(12) "SSO" means "sanitary sewer overflow", the escape of wastewater or pollutants from, or beyond the intended or designed containment of a sewer collection system.

(13) "Class 1 SSO" (Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that:

- (a) effects more than five private structures;
- (b) affects one or more public, commercial or industrial structure(s);
- (c) may result in a public health risk to the general public;
- (d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or

(e) discharges to Waters of the state.

(14) "Class 2 SSO" (Non Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that does not meet the Class 1 SSO criteria.



(15) "USMP" means the "Utah Sewer Management Program".

### **R317-801-2. General Permit Requirements.**

2.1 General Permit for sewer collection system. All permittees are required to operate under the General Permit for sewer collection systems as required by this rule, R317-801.

#### 2.2 Notice of Intent Requirements.

(1) A permittee shall submit a Notice of Intent to be covered by the General Permit for sewer collection systems between October 1, 2012 and November 30, 2012. A new permittee for a sewer collection system shall submit a Notice of Intent to be covered by the General Permit for sewer collection systems at least three (3) months prior to operation of the system.

(2) Forms and instructions for submitting a Notice of Intent can be obtained online on the DWQ's website.

#### 2.3 Effective Date of General Permit.

General permit coverage will be in effect when the Notice of Intent has been submitted, approved and declared complete by the Executive Secretary.

### **R317-801-3. General Permit Provisions.**

#### 3.1 Prohibitions.

(1) Any SSO that results in a discharge of untreated or partially treated wastewater to Waters of the state is prohibited.

(2) Any SSO that results in a discharge of untreated or partially treated wastewater that creates a health hazard, nuisance, or is a threat to the environment is prohibited.

#### 3.2 General SSO Requirements.

1) The permittee shall take all feasible steps to eliminate SSOs to include:

(a) properly managing, operating, and maintaining all parts of the sewer collection system;

(b) training system operators;

(c) allocating adequate resources for the operation, maintenance, and repair of its sewer collection system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures in accordance with generally acceptable accounting practices; and,

(d) providing adequate capacity to convey base flows and peak flows, including flows related to normal wet weather events. Capacity shall meet or exceed the design criteria of R317-3.

(2) SSOs shall be reported in accordance with the requirements of R317-801-4.

(3) When an SSO occurs, the permittee shall take all feasible steps to:

(a) control, contain, or limit the volume of untreated or partially treated wastewater discharged;

(b) terminate the discharge;

- (c) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water; and,
- (d) mitigate the impacts of the SSO.

#### **R317-801-4. General Permit SSO Reporting Requirements.**

4.1 SSO Reporting. SSOs shall be reported as follows:

(1) A Class 1 SSO shall be reported orally within 24 hrs and with a written report submitted to the DWQ within five calendar days. Class 1 SSO's shall be included in the annual USMP report.

(2) Class 2 SSOs shall be reported on an annual basis in the USMP annual report.

4.2 Annual Report. A permittee shall submit to DWQ a USMP annual operating report covering information for the previous calendar year by April 15 of the following year.

#### **R317-801-5. SSMP Requirements.**

5.1 SSMP. The permittee shall have and implement a written SSMP and shall make it available to DWQ upon request. A copy of the SSMP shall be publicly available at the permittee's office and/or available on the Internet. The SSMP must be publicly noticed by the permittee and approved by the permittee's governing body at a public meeting. The main purpose of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sewer collection system to reduce and prevent SSOs, as well as minimize impacts of any SSOs that occur.

5.2 Contents of SSMP. The SSMP shall include:

(1) Organization information to include:

(a) The name or position of the responsible or authorized representative;

(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and,

(c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to DWQ, the public (if needed) and other agencies if applicable (such as County Health Department).

(2) Sewer collection system use ordinances, service agreements, or other legally binding methods, that:

(a) Prohibit unauthorized discharges into its sewer collection system i.e. I/I, stormwater, chemical dumping, unauthorized debris and cut roots;

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the laterals owned or maintained by the permittee;

(d) Limit the discharge of FOG and other debris that may cause blockages;

(e) Require compliance with pretreatment requirements;

(f) Provide authority to inspect industrial users; and,

(g) Provide for enforcement for violations of the requirements.

(3) An Operations and Maintenance Plan which includes:

(a) An up-to-date map of the sewer collection system, showing all gravity line segments, manholes, pumping facilities, pressure pipes, gates and all other applicable conveyance facilities;

(b) A description of routine preventative operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sewer collection system with more frequent cleaning and maintenance targeted at known problem areas. The plan should include regular visual and TV inspection of manholes and sewer pipes and a system of ranking the condition of sewer pipe and manholes. The plan should have an appropriate system to document scheduled and all other types of work activities, such as a maintenance, management, system, or paper work orders;

(c) A Rehabilitation, Replacement and Improvement Plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each class of deficiencies. Rehabilitation and replacement should focus on sewer pipes that are at risk of failure or prone to more frequent blockages due to pipe defects. The rehabilitation and replacement plan shall include a CIP, if required, that addresses proper management and protection of the infrastructure assets;

(d) Schedule for training on a regular basis for staff and contractors in operations and maintenance consistent with DWQ continuing education requirements for certified operators; and,

(e) Providing for equipment and replacement part inventories, including identification of critical replacement parts. (This may include a list of vendors that the equipment and/or part can be purchased from, or local agreements).

(4) Design and performance provisions which include:

(a) Design, construction standards and specifications that meet or exceed R317-3 for the installation of new sewer collection systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sewer collection systems; and,

(b) Procedures and standards for inspecting, testing and documenting the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(5) A SORP which has the following measures to protect public health and the environment:

(a) A program to respond to overflows which addresses:

1. Receipt and documentation of information regarding a sewer overflow;

2. Dispatch of appropriate crews to the site of the sewer overflow;

3. Overflow correction, containment, and cleanup including procedures to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to Waters of the state and to minimize or correct any adverse impact on the environment resulting from the sewer overflow;

4. Preparation of an overflow report by responding personnel; and,

5. Follow up with affected persons,



(b) Procedures for prompt notification to the public.

(c) Procedures to notify appropriate regulatory agencies and other potentially affected entities to include:

1. DWQ to comply with SSO reporting requirements;
2. County Health Department, local water supply agencies as appropriate, and other affected agencies should the SSO potentially affect the public health or reach the Waters of the state;
3. Utah Division of Emergency Response and Remediation, if hazardous materials are or may be involved; and,
4. Any other required UPDES, State, or Federal reporting requirements.

(d) Procedures to ensure that appropriate staff personnel are aware of and follow the SORP and are appropriately trained.

(6) For permittees with 2000 or more connections, and at the option of permittees with less than 2000 connections, a FOG control plan consistent with the potential for FOG discharge from commercial and industrial dischargers. Where required, the FOG control plan shall include some or all of the following:

(a) An implementation plan and schedule for a residential and commercial public education outreach for the FOG control plan that promotes proper disposal of FOG;

(b) A plan for the disposal of FOG generated within the permittee's service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG;

(c) Sewer collection system use ordinances, service agreements, or other legally binding methods, that prohibit FOG discharges to the system;

(d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;

(e) A FOG inspection, monitoring and evaluation plan;

(f) Identification of resources to do inspections and enforce the FOG control plan; and,

(g) A maintenance schedule for lines affected by FOG blockages.

(7) For permittees with 2000 or more connections, and at the option of permittees with less than 2000 connections, a SECAP. Where required, the SECAP shall include the following:

(a) an evaluation of the wastewater collection system's existing hydraulic capacity using historical information such as flow, system records, current zoning, local development options, and maintenance records;

(b) identification of system deficiencies; and,

(c) a CIP that includes an appropriate model for the system that can be used to evaluate the hydraulic conditions in the system and identify existing and forecast future deficiencies to provide hydraulic capacity such as for future dry weather peak flow conditions, as well as the appropriate design for storm or wet weather events. The CIP shall establish a short and long term schedule to address the deficiencies and conditions identified, including a priority list, alternative analysis, and schedule for recommended

upgrades. The CIP shall include increases in pipe size, I/I reduction plans, increases in pumping capacities and/or redundancies, storage capacity increases and recommended trunk line cleaning schedules or other monitoring activities. The CIP shall identify the sources of funding. The schedule shall be reviewed and adjusted yearly.

### 5.3 Monitoring, Measurement, and SSMP Modifications.

(1) The permittee shall maintain relevant information that can be used to establish and prioritize appropriate SSO prevention activities and shall document all monitoring activities (i.e. daily cleaning activities, CCTV video records, manhole inspections, and hot spot activities).

(2) The permittee shall regularly review the effectiveness of each element of the SSMP and shall monitor the SECAP implementation (when required).

(3) The permittee shall annually assess the success of the operation and maintenance plan (i.e. line cleaning, CCTV inspections and manhole inspections, and SSO events) and adjust the operation and maintenance plan as needed based on system performance.

(4) The permittee shall update SSMP elements, as appropriate, based on monitoring or performance evaluations.

(5) The permittee shall regularly identify and illustrate SSO trends, including frequency, location, and volume.

(6) The permittee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every five years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the permittee's compliance with the SSMP, including identification of any deficiencies in the SSMP and steps to correct them.

(7) The permittee is encouraged to communicate with the public, as needed, on the development, implementation, and performance of the SSMP. The permittee may establish a public outreach/communication plan which shall provide the public with the opportunity to provide input to the permittee as the SSMP is developed and implemented.

(8) The SSMP shall be prepared by, or under the direction of, a Utah certified professional engineer or another qualified professional.

(9) The SSMP must be completed by the deadlines listed in the Timeframe for Implementation in R317-801-6.

### R317-801-6. Certification, Submission and Implementation Requirements.

6.1 Timeline for Notice, SSMP, and Certification. The permittee shall certify to DWQ that a SSMP is in place that is in compliance with the USMP by submitting a notice to DWQ within the time frames identified in the following time schedule:

Table 1. Timeframe for Implementation.

Task	Completion Dates by Population			
	>50,000 population	15,001 to 50,000 population	3,501 to 15,000 population	3,500 and Less population

Notice of

Intent to 4 - 6 Months after effective date of rule

be covered

by General

Permit

Completion	24 months	30 months	36 months	42 months
of SSMP	after	after	after	after
(excluding	effective	effective	effective	effective
SECAP)	date	date	date	date

Completion	36 months	42 months	48 months	60 months
of SECAP	after	after	after	after
when	effective	effective	effective	effective
required	date	date	date	date

6.2 Significant Modifications . Significant modification of the SSMP must be public noticed by the permittee and approved by the permittee's governing body at a public meeting. A new notice certifying the revised SSMP is in place shall be sent to DWQ.

6.4 Incomplete Reports . If a permittee becomes aware that it failed to submit required information in any notice or report, the permittee shall promptly amend the notice or report.

6.5 Certification of Notices and Reports . All notices and reports submitted to DWQ shall be signed and certified as required in R317-8-3.4.



# The Salt Lake Tribune

## Toxic mercury topic No. 1 at Great Salt Lake forum

Environment • USGS researcher hails new pollution controls.

By JUDY FAHYS

The Salt Lake Tribune

Published: May 10, 2012 07:40AM

Updated: May 9, 2012 11:35PM

One of the world's leading mercury scientists said Wednesday that new federal pollution controls will yield real benefits for Americans.

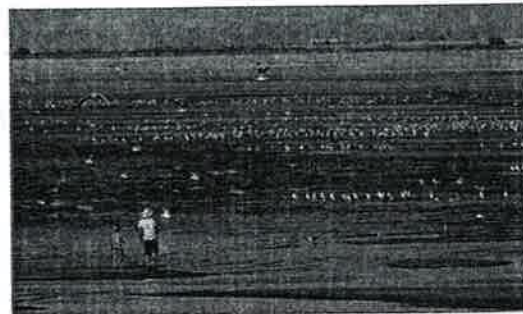
David P. Krabbenhoft told attendees of the Great Salt Lake Issues Forum that consumers can expect less toxic mercury in the fish they eat because of the laws. The effects will also ripple through the environment everywhere, from the oceans to the Great Salt Lake and the other 19 bodies of water around Utah where sport fish and waterfowl are highly contaminated.

The U.S. Geological Survey researcher pointed to his own studies showing that when mercury emissions are cut, so is food-chain contamination.

"Wonderful news," he said in the forum's opening session, "that I think is really the best evidence anywhere that, on an ecosystem scale, we can solidly conclude that reductions in emissions will result in ... very quick responses from [natural] systems."

Krabbenhoft's talk kicked off three days of discussions by more than 100 devotees of Utah's iconic lake and the singular ecology it supports. Presenters were set to talk about preserving water quality in the Great Salt Lake, the impacts of mining on it and what's happening at other saline lakes, including those in California and Israel.

But the first day focused on mercury, with presentations of detailed scientific studies on migratory birds, brine flies, brine shrimp, microorganisms and even sediment. In 2003, researchers from Krabbenhoft's agency measured in the Great Salt Lake some of the highest concentrations of toxic methylmercury ever seen anywhere.



Leah Hogsten | Tribune file photo Jason Henrie, of Murray, walks on Silver Sands Beach of the Great Salt Lake in 2010. New federal environmental rule should help reduce mercury in the lake and other water bodies, according to researcher David Krabbenhoft.

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Speaker after speaker Wednesday pointed out that new questions arise with every completed study.

Jodi Gardberg of the Utah Division of Water Quality noted that a sweeping study of the Great Salt Lake in 2008 revealed trends in how mercury builds in the food chain. But it suggested new lines of study, including the possibility that some birds are loading up with mercury before they even get to the lake and the booster effect that selenium appears to have on the transformation of mercury from its elemental form to its poisonous form that causes so much concern.

Krabbenhof noted that, even after decades of solid mercury research, it remains unclear what happens when the contaminant encounters certain conditions in the environment, conditions that sometimes temper and sometimes magnify its harmful impacts.

"It's not just about emissions" from regulated industry, he said. "There's a whole lot more that has to happen before it becomes a problem."

Such things as oxygen levels, the presence of certain minerals, microorganisms — all could alter the chemistry of mercury in the natural environment.

In December, the U.S. Environmental Protection Agency announced it would require new controls on coal- and oil-fired power plants that release mercury from their stacks.

EPA Administrator Lisa Jackson hailed the new regulations as "a great victory for public health — especially the health of children."

Utah health and environmental advocates also applauded the move, 20 years in the making, for an emissions cleanup estimated to cut premature deaths by up to 11,000 annually nationwide, reduce heart attacks by 4,700 and prevent 130,000 cases a year of childhood asthma symptoms.

But industry complained the regulations threaten to put thousands of people out of work, raise electricity rates and test the reliability of the nation's electric power grid. Utah Gov. Gary Herbert wrote a letter urging a delay of the regulations and Attorney General Mark Shurtleff joined a friend-of-the-court brief objecting to them.

Meanwhile, Rocky Mountain Power said the new regulations might speed the retirement of its carbon coal-fired power plant in Price Canyon.

The company has been discussing with Utah decision-makers the possible closure of the 190-megawatt plant in 2020, but no decision has been announced yet.

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## Deseret News

### West Jordan water rates and storm water fees increase May 1

Published: Thursday, April 26 2012 2:46 p.m. MDT

WEST JORDAN — Water rates and storm water fees May 1 to cover increasing costs and bring the city into compliance with state and federal mandates.

The City Council approved a 4 percent hike for both the fixed monthly “availability” charge and also the “commodity” charge per 1,000 gallons. The Council also voted to cut all conservation programs, saving \$100,000 per year.

The rate increase covers the higher wholesale water costs the city expects to pay to the Jordan Valley Water Conservancy District and costs associated with capital facilities construction (pipes, storage reservoirs, valves, monitoring systems).

Storm water rates will increase from \$1.80 to \$3.65 per home to pay for more employees and the equipment needed to inspect, clean and repair the existing storm drain system and build the pipes, grates and detention basins required by state and federal EPA water quality mandates.

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# The Salt Lake Tribune

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## State wants to keep public, press away from tar sands hearing

Session to be in room too small to allow observers to sit in.

By JUDY FAHYS

The Salt Lake Tribune

Published: May 11, 2012 01:38PM

Updated: May 11, 2012 12:06AM

An administrative judge will consider plans for the nation's first tar sands project in a cramped upstairs conference room at the Utah Department of Environmental Quality next week.

But the interested public, along with local and national media, won't be able to observe the legal wrangling firsthand. Anyone not officially part of the quarrel over the PR Springs project in Uintah County will have to observe via video link in a spacious ground-floor conference room, according to DEQ.

Assistant Attorney General Sandra Allen, acting as the state agency's administrative law judge, will begin on Thursday a two-day hearing on the Division of Water Quality's reasons for approving the tar sands project and an environmental group's formal appeal of that decision.

But already, a controversy has erupted over the DEQ's rare — perhaps unprecedented — process for conducting its fact-finding meeting.

"It's an assault on democracy," said John Weisheit, whose group Living Rivers prompted the proceeding by challenging the water agency's approval.

Weisheit and his lawyer will be in the room with Allen. Also invited are a second assistant attorney general representing regulators who approved a discharge permit for the tar sands project and other key parties. But Weisheit and others wonder why the public is being kept at a distance.

"You have to question why they are afraid to have cameras and the public in the room," offered good-government activist Claire Geddes, calling the hearing arrangement "absolutely bizarre." "The public and press should be allowed to attend all hearings especially when public health and safety are such an important issue."

For its part, the DEQ declared the hearing "closed" because of concerns about disruptions by the public and news media that have said they plan to attend. Tar sands protesters recently demonstrated at the School and Institutional Trust Lands Administration offices, and air-quality activists have waved posters and applauded a public-comment hearing on the Tesoro refinery last month.

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"It is not a public meeting, and it doesn't fall under the authority of the public meetings law because it's administrative, it's a legal proceeding," said DEQ Director Amanda Smith. "It can only be open to the parties."

The judge needed to be able to focus on the arguments presented by both sides, to weigh the highly technical details, without "also having to manage the public," according to an email from DEQ. Smith noted that the live-streaming will allow people who are interested to see the discussion real time. Even if they were in the room, they would not have been allowed to ask or make comments, she added.

Attorney Tim Smith, who answers inquiries to the Utah Freedom of Information Hotline, said that the odd arrangement appeared to violate the spirit and the letter of state's Open and Public Meetings Act.

The law, he said, applies to all government agencies with the goal of keeping the public's business transparent. And, while it does allow for closing the doors for sensitive issues — such as discussing the character of a public employee or planned real estate purchases — he couldn't see how that could apply to the tar sands hearing.

"I don't know if that's a basis for closing a meeting," he said, "the presumption that people might be rambunctious."

Raphael Cordray, a leader of the group Utah Tar Sands Resistance, said people in the environmental community were "outraged and astounded" by the decision to handle the hearing that way.

She said her group had plans to witness the hearing — but not to protest or disrupt it. The proceeding is formal, and her group want to be sure the case is handled thoughtfully and thoroughly.

"We're treating it with respect because it is an important process," she said.

Alex Chadwick, a longtime reporter for public broadcasting who is working on a series of radio documentaries on energy, wrote to Smith and asked her to reconsider, arguing that "it would be a disservice to the public to close off access to a public hearing of this nature, and all the more so as energy questions are of increasing concern for all of us."

Chadwick said Thursday that Smith rejected his request.

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## Congress hears about Utah's unconventional energy

The Canadian company U.S. Oil Sands Inc. testified before a U.S. House panel on Thursday that it plans to begin pumping oil from state lands in southern Uintah County as early as next year. Cameron M. Todd, the company's CEO, told the Subcommittee on Energy and Environment that its breakthrough technology using a nontoxic, biodegradable solvent made from citrus peels will enable his company to process about 50,000 barrels of oil a day within 10 years.

Samantha Mary Julian, director of the Utah Energy Development Office, also testified at the congressional hearing and said that companies are already tapping into unconventional fuels in the state.

"Leading technology companies have settled in Utah, permits have been granted and efforts begun," she

said, according to written testimony published on the state's Web page. "Hundreds of millions of private dollars are being invested and jobs are being created as we speak."

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